CLAIMS

We claim:

1. A composition comprised of a plurality of nucleocapsid protein monomers, the primary sequences of which are derived from duck hepatitis B virus, wherein said plurality of monomers are assembled to form a particle.

2. The composition of claim 1 wherein at least a first portion of said nucleocapsid protein monomers include a first hapten.

3. The composition of claim 2 wherein at least a second portion of said nucleocapsid protein monomers includes a second hapten different from said first hapten.

4. The composition of claim 1 wherein said particle includes a nucleic acid.

5. The composition of claim 2 wherein said particle includes a nucleic acid.

6. The composition of claim 3 wherein said particle includes a nucleic acid.

7. The composition of claim 4 wherein said nucleic acid is selected from the group consisting of: SEQ IDs 3-19.

8. The composition of claim 5 wherein said nucleic acid is selected from the group consisting of: SEQ IDs 3-19.

9. The composition of claim 6 wherein said nucleic acid is selected from the group consisting of: SEQ IDs 3-19.

10. The composition of claim 2 wherein said first hapten is associated with a disease condition caused by an agent selected from the group consisting of: single stranded DNA viruses, double stranded DNA viruses, single stranded RNA viruses, double stranded RNA viruses, intracellular parasites, fungi, bacteria, and cancer.

11. The composition of claim 3 wherein said second hapten is associated with a disease condition caused by an agent selected from the group consisting of: single stranded DNA viruses, double stranded DNA viruses, single stranded RNA viruses, double stranded RNA viruses, intracellular parasites, fungi, bacteria, and cancer.

12. The composition of claim 1 further comprising first and second haptens and said particle is assembled as an extrinsic mosaic.

13. The composition of claim 1 further comprising first and second haptens intrinsic to said nucleocapsid protein monomers and said particle is assembled as an intrinsic mosaic.

14. A method of delivering nucleic acids to a subject in need thereof, comprising, administering to said subject a composition comprised of a nucleic acid and a plurality of nucleocapsid protein monomers, the primary sequences of which are derived from duck hepatitis B virus, wherein said plurality of

monomers are assembled to form a particle, and wherein said nucleic acid is contained within said particle.

15. The method of claim 14 wherein at least a first portion of said nucleocapsid protein monomers include a first hapten.

16. The method of claim 14 wherein at least a second portion of said nucleocapsid protein monomers includes a second hapten different from said first hapten.

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17. A nucleocapsid protein monomer particle processing method, comprising the steps of:

providing a composition comprised of a plurality of nucleocapsid protein monomers, the primary sequences of which are derived from duck hepatitis B virus, wherein said plurality of monomers are assembled to form a particle,

exposing said particle to a charged agent to produce a mixture of said monomers in a non-particle form, and

removing said charged agent from said mixture to assemble a particle from nucleocapsid protein monomers in said mixture.

18. The method of claim 17, further comprising the step of removing unwanted nucleic acid from said mixture produced during said exposing step.

19. The method of claim 17, further comprising the step of adding a nucleic acid to said mixture produced during said exposing step.

20. The method of claim 17, wherein said charged agent used in said exposing step is a divalent cation selected from the group consisting of: Mg^{+2}, Zn^{+2}, Ba^{+2}, Sr^{+2}, Ca^{+2} and Pb^{+2}.

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21. A method for illiciting an immunogenic response in a patient in need thereof, comprising the step of administering to said patient an effective amount of a composition comprised of a plurality of nucleocapsid monomers, the primary sequences of which are derived from duck hepatitis B virus, wherein said plurality of monomers are assembled to form a particle.

22. The method of claim 21 wherein said composition further comprises a nucleic acid incorporated within said particle.

23. The method of claim 21 wherein said composition further comprises one or more haptens associated with at least a portion of said plurality of nucleocapsid monmers.